

# Durham Environmental Affairs Board 2014 Annual Report

The Durham City-County Environmental Affairs Board (EAB) is an advisory board that consists of eleven voting members and seven non-voting, ex-officio members. Our mission is to recognize the importance of local cooperation and advise both the City and County on environmental issues. The eleven seats on the EAB are water resources, public policy, solid waste, energy, biological science, education, air quality, public health, law, engineering, and soil and water conservation. EAB considers topics such as air and water quality, the environmental impacts of development and pollution, energy conservation, environmental education, climate change, green building design, and greenhouse gas reductions. The Board advocates environmental accountability, in both the private and public sectors, and meets the first Wednesday of every month at 6:00 p.m. in the Committee Room on the second floor of City Hall.

The board's official duties are:

1. To advise the City and County on environmental policy;
2. To educate the public and local officials on environmental issues;
3. To perform special studies and projects requested by the City and/or County on environmental questions;
4. To facilitate citizen participation in local government's consideration of matters involving the environment;
5. To promote intergovernmental and public/private cooperation and coordination;
6. To perform such other duties as may be assigned to it from time to time by the City and/or County;
7. To adopt Rules of Procedure for the orderly dispatch of its business.

A key part of fulfilling the EAB's public outreach and education duties is achieved by hosting presentations on new ordinances, ideas, and issues that might impact the environment. The EAB provides a mechanism for communication with the local governments on environmental issues in Durham. The EAB hopes to encourage more people to attend and discuss issues by having City and County staff and others share information related to the environment.

In 2014, the EAB added two new members, Rachel McIntosh-Kastrinsky and Frank Hund. During 2014 the Board focused on: preparing recommendations for sustaining a healthy urban forest in Durham, water quality assessments, monitoring legislative activities regarding environmental issues, and hydraulic fracturing.

## Accomplishments for 2014

In 2014, the Board provided feedback on the environmental impact of the items summarized below:

### **1. Sustaining a Healthy Urban Forest**

At the request of some members the Durham City Council, the EAB evaluated the future health of Durham's urban forest. The EAB determined that in order for the City of Durham to maintain the approximate canopy coverage from trees on public property, 1,680 trees must be planted and 750 trees must be safely removed each year for the next 20 years. Current tree replacement operations support the planting of only 500 trees and the removal of only 300 potentially hazardous dead/dying trees per year. Without additional resources, the City faces the reduction in the quality of life, economic, ecological, and human health benefits for its current and future citizens. The EAB recommended that the Durham City Council allocate resources to develop an Urban Forest Master Plan and facilitate the planting of at least 1,680 trees per year, the removal of the 750 aging trees per year, and the proper maintenance of all trees on public property in Durham.

### **2. Comments on Proposed Rules for Hydraulic Fracturing in NC**

The legalization of hydraulic fracturing in North Carolina has a large number of environmental implications for citizens of Durham County. The EAB presented a comprehensive report of the potential environmental impacts for Durham to City Council and Board of County Commissioners in 2012, which was approved. However, since then, state-level legislation has passed that supersedes City and County resolutions. Therefore the EAB remains concerned that hydraulic fracturing will lead to adverse human health and environmental impacts in Durham. In 2014, the North Carolina Department of Environment and Natural Resources (DENR) accepted comments on the proposed 15A NCAC 05H rule text for oil and gas exploration and development. The EAB prepared and submitted comments on the proposed hydraulic fracturing rules. The EAB also asked that the City Council and County Commissioners review and forward the comments to DENR.

### **3. Review of Cambistat Safety**

There had been public safety concerns regarding the use of Cambistat, a chemical that slows the growth of plants. The EAB reviewed available information regarding Cambistat in order to evaluate its safety. Due to the application method combined with the relatively low toxicity and soil mobility, the EAB was convinced that Cambistat is safe when used appropriately. However, the EAB re-emphasized the importance of sufficiently informing nearby property owners and ensuring the proper application of Cambistat.

#### **4. Response to Bill Draft 2013-TQz-22 [v.5]**

The EAB prepared and delivered to local officials a motion in opposition of Bill Draft 2013-TQz-22 [v.5], An act to clarify the authority of local governments to adopt certain agricultural and environmental ordinances. The EAB expressed concern regarding the impacts of this bill, specifically the prevention of municipalities from regulating the removal, replacement, and preservation of trees. We believe this law would be detrimental to Durham's environment for reasons such as soil erosion, storm water management, water quality, flood management, air quality, "heat island" effect, public health, economics, ecology, the natural habitat, and other adverse unintended environmental consequences.

#### **5. Reduction of Durham Solid Waste Staff**

It was brought to the EAB's attention that that the 2014-2015 Durham City Budget eliminated three positions from Solid Waste Management: the Waste/Recycling Coordinator position and two of the three Code Enforcement Officer positions. The EAB requested from Donald Long a list of all tasks the Waste/Recycling Coordinator and the two Code Enforcement Officers performed and which current staff will be assigned these duties. The EAB also requested that a Solid Waste representative be named, that this person begins attending meetings to answer questions regarding city waste reduction activities, and report on and answer questions regarding city waste reduction activities.

#### **6. Tour of Durham Water Treatment Facility**

Vicki Westbrook, the Assistant Director of Water Management for the City of Durham, invited the EAB to take a tour of a water treatment facility. The EAB toured the Williams Water Treatment plant on Hillandale Road on August 6, 2014 and learned a great deal about how water is readied for public use in Durham.

#### **7. Rain Catchers Pilot Project**

Laura Webb Smith presented to the EAB about the Rain Catchers Pilot Project. This project was designed to improve water quality in South Ellerbe Creek by providing nearby residents with best management practices for reducing the volume of stormwater runoff. Success of this program will be determined over the next 10 years by water quality and hydrology assessments, as well as the measurement of infiltration from downspout disconnection by NCSU. The program has sponsored the installation of 40 rain gardens, 108 cisterns, 12+ downspout disconnections, 38 backyard trees, and 68 street trees.

#### **8. Durham County Solid Waste Pilot Roll Out Recycling Program**

Brian S. Haynesworth, a Solid Waste Program Manager for Durham County, presented to the EAB the County project with the intent to decrease landfill use and promote environmental stewardship by extending recycling options to residents living outside Durham city limits. This

pilot project ran from November 2013 through June 2014. The EAB supported this project, and in June 2014 the Durham County Board of County Commissioners approved the expansion of the County's Roll Cart Recycling Pilot Program for the unincorporated areas of Durham County for the 2014 fiscal year.

## **9. Solar Power**

Sally Robertson presented to the EAB, informing us about how the solar industry is a growing market and a very cost effective means for the citizens of Durham to save energy. She represents Solarize Durham, NC WARN's first Solarize program, which ran from January 2014 to April 2014. The Solarize program helps reduce the cost of adding solar cells to homes by combining multiple small orders and obtaining bulk pricing.

## **10. Northeast Creek Water Quality**

In 2013, the EAB was consulted regarding potential eco-friendly and humane means of improving the dissolved oxygen levels in the Northeast Creek. It was determined by a contractor that low dissolved oxygen levels were the result of three beaver dams and three roadway culverts that slow water velocity, in addition to relatively low natural flow conditions. The EAB reviewed potential solutions, and recommended to Durham City Officials that flow devices be installed at each of the three beaver dams to serve as an inexpensive, and likely effective, means to increase the flow rate and the dissolved oxygen levels in the Northeast Creek. In December of 2014, Danielle Mir, a Water Quality Analyst with the City of Durham, informed the EAB that a Request for Proposals was about to be issued "seeking a qualified environmental management company to install and maintain a flow control device to increase dissolved oxygen without disturbing the beaver population."

## **11. Ellerbe Creek Green Infrastructure Partnership Presentation**

Peter Rob of American Rivers and Mel Norton presented about the Ellerbe Creek Green Infrastructure Partnership, which intends to evaluate the benefits of green infrastructure and sustainable stormwater management by identifying green infrastructure opportunities such as green streets, cisterns, bioretention, green roofs, permeable pavers, and wetlands. The intended results of these actions will be long-term positive improvements to our local streams and lakes.

## **12. Assessing the Need for a City-County Stormwater Committee**

Melissa Rooney requested from the Board that a Joint City-County Stormwater Committee be formed. This committee would be composed of two County Commissioners, two City Council members, the Soil and Water Conservation District Supervisor, Director of City Stormwater Services, Director of County Engineering, Director of Soil and Water Conservation District, and a

City/County Attorney. The Board has also heard responses to this request from City and County Stormwater Programs. The Board took no formal action regarding this request.

### **13. 2012 State of Our Streams Report**

Michelle Woolfolk presented the completed 2012 State of Our Streams report, which included water quality analyses over time for many important bodies of water in Durham. The report is available at: [http://durhamnc.gov/ich/op/pwd/storm/Documents/StateOfStreams/state\\_of\\_our\\_streams2012.pdf](http://durhamnc.gov/ich/op/pwd/storm/Documents/StateOfStreams/state_of_our_streams2012.pdf).

### **14. Downtown Durham Open Space Plan**

City Planner Tom Dawson presented the Downtown Durham Open Space Plan to the EAB, which includes several urban open spaces, public parks, and rooftop gardens. The EAB is excited to support this project and see it progress.

### **15. Prepared a Resolution Honoring Glen Whisler**

The EAB prepared a resolution honoring County Engineer Glen Whisler in recognition of his retirement in February 2014. Mr. Whisler was instrumental in guiding and strengthening the County's commitment to environmental stewardship through constructing green buildings, enhancing storm water management, protecting open space, upgrading wastewater treatment facilities, and establishing the Sustainability Office.

## **EAB Goals for 2015**

### **1. Sustain a Healthy Urban Forest in Durham**

In May 2015 the EAB will present the report "Sustaining a Healthy Urban Forest in Durham, NC", which was submitted to local officials in January of 2015. We hope that the presentation and report will motivate the City Council to take proactive action regarding the imminent loss of trees in Durham.

The EAB also plans to publicize the issue of mass tree loss to citizens and raise public support for tree replacement in Durham. We also plan continued involvement with urban forest issues, such as researching environmentally-friendly ways of using trees removed for public safety.

### **2. Advocate for Recycling in Durham Public Schools**

The EAB would like to support the education for and enforcement of recycling in Durham Public Schools.

**3. Assist Durham with Climate Change Preparedness**

The EAB is very interested in investigating the potential effects of climate change here in Durham, NC. We are particularly interesting in determining how Durham can best prepare for expected environmental changes due to climate change and extreme weather.

**4. Increase Community Outreach and Involvement**

The EAB plans to increase community outreach projects in order to better involve local residents in environmental issues. Specifically, we would like to interact with residents about increasing building efficiency, solar power, alternate fuel sources, the light rail, taking care and making better use of the Geer Cemetery, car and bus idling around schools, and planting gardens as part of the Poverty Reduction Initiative.

**5. Receive Training in Soil and Water Conservation**

A great deal of EAB business deals with issues related to water, such as drinking water quality and storm water runoff. Three Board members would like to enroll in a course that would improve the EAB's understanding of local water resources and allow us to better advise local officials regarding these resources, benefiting both the city and county. We feel that the Basic Training for Soil and Water Conservation Supervisors at the UNC School of Government would fulfill this purpose and plan to enroll in the course the next time it is offered.

**6. Sponsor the Sustainable Properties Award at the Golden Leaf Awards**

The EAB would like to sponsor the Sustainable Properties Award at the 2015 Golden Leaf Awards ceremony, to promote and publicize the building of environmentally sustainable properties in Durham.

**7. Monitor Hydraulic Fracturing in NC**

The EAB will continue to monitor development of state regulatory framework for natural gas extraction by hydraulic fracturing, hear presentations regarding fracking from citizens, and convey our opinions about hydraulic fracturing legislation to local government officials.

**8. Support the Rain Catchers Pilot Project**

Success of this program would be determined over the next 10 years by water quality and hydrology assessments, as well as the measurement of infiltration from downspout disconnection by NCSU. The EAB plans to support this project and help translate its findings to the public and local government officials.

**9. Support the Downtown Durham Open Space Plan**

The EAB intends to support the Downtown Durham Urban Space Plan, to increase the look, feel, and environmental-friendliness of Downtown Durham.

**10. Support the Polystyrene Container / Plastic Bag Reduction Group**

The EAB plans to continue supporting the activities of the Polystyrene Container / Plastic Bag Reduction Group, now called Don't Waste Durham.

**11. Support the Durham County Solid Waste Pilot Roll Out Recycling Program**

The County began a project with the intent to decrease landfill use and promote environmental stewardship by extending recycling options to residents living outside Durham city limits. This pilot project ran from November 2013 through June 2014. The EAB supported this project, and in June the Durham County Board of County Commissioners approved the expansion of the County's Roll Cart Recycling Pilot Program for the unincorporated areas of Durham County for the 2014 fiscal year. The EAB plans to continue supporting this project.

**12. Support the Northeast Creek Water Quality Improvement Attempts**

The EAB intends to continue following the progress of and supporting the City's progress in contracting the installation and maintenance of a flow control device to increase dissolved oxygen without disturbing the beaver population in Northeast Creek.

## **2014 Durham Environmental Affairs Board Members**

Elizabeth Chan (chair), Marion Lamberth (vice chair), Thomas Poole (secretary), Scott Schwartz, Joseph Pinto, Rachel McIntosh-Kastrinsky, Jessica Isola, Mark Fogel, Mark DeWitt, Christopher Werner, and Ann Woodward.

## **2014 Durham Environmental Affairs Board Staff Support**

Kathleen Snyder, Planner, Durham City-County Planning

## **2014 Durham Environmental Affairs Board Ex-Officio Members**

City Solid Waste Management, City-County Planning Director, City Public Works Director, City Water Management Director, County Health Department, Durham County Environmental Health Department, City-County Sustainability Manager

## **2014 Durham Environmental Affairs Board City Council Representative**

Councilman Don Moffitt (Jan-Mar) and Councilman Eddie Davis (Mar-Dec)

2014 Durham Environmental Affairs Board County Board of  
Commissioners Representative

Commissioner Ellen Reckow